

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method for signal processing, wherein a sensor signal of an image sensor is provided as an input and wherein the input is reconstructed in a reconstruction filter to establish an output for further processing, wherein the reconstruction filter comprises a luminance-reconstruction-filter, a red-green-blue-color-reconstruction-filter and a contour-reconstruction-filter, wherein the input comprises a plurality of pixels, and a pixel provides a color value assigned to at least one of the colors red, green or blue, and wherein the method comprises the steps of: applying the reconstruction filter to an array of pixels of predetermined array size comprising a number of pixels, wherein at least one of the number of pixels is formed by a red-pixel assigned to the color of red, at least one of the number of pixels is formed by a blue-pixel assigned to the color of blue, and at least one of the number of pixels is formed by a green-pixel assigned to the color of green, weighting the red-pixel and/or the blue-pixel by a green-parameter, and applying the contour-reconstruction-filter ~~contour—reconstruction—filter~~ by multiplying pixels of the array of pixels by contour-reconstruction-filter coefficients after weighting by the green-parameter and summing the multiplied pixels into one output-pixel, and wherein the method comprises centering the output-pixel in the array of pixels, and applying the contour-reconstruction-filter in parallel with application of ~~a the-color~~ color-reconstruction-filter to the pixels.

2. (Canceled).

3. (Currently Amended) The method as claimed in claim 1, also comprising applying the luminance-reconstruction-filter by summing the pixels of the array after weighting by the green-parameter into one luminance reconstruction output-pixel.

4. (Canceled)

5. (Currently Amended) The method of claim 1, characterized by combining the luminance-reconstruction-filter and ~~a~~ the low-pass-filter into one single filter.

6. (Currently Amended) The method as claimed in claim 1, characterized by applying the color-reconstruction-filter to an array-size of 3.times.3 or 5.times.5, ~~in particular has wherein the color-reconstruction-filter is applied to an~~ array-size of 5.times.5 in case of a heavy sensor matrix.

7. (Previously Presented) The method of claim 1, characterized by applying subsequent to a false-color-filter a post-filter of 2.times.2 array-size, to position a center-output-pixel of a predetermined small array of green-pixels in phase with a white-pixel which is centered with respect to the same array as that to which the luminance-reconstruction-filter has been applied to.

8. (Original) The method as claimed in claim 1, characterized by applying the contour-reconstruction-filter, in parallel with the luminance-reconstruction-filter and by adding their reconstructed signals thereafter.

9. (Original) The method as claimed in claim 1, characterized by applying the contour-reconstruction-filter to an array-size, which exceeds the size of an array to which the color-reconstruction-filter is applied to.

10. (Original) The method as claimed in claim 1, characterized by applying the contour-reconstruction-filter to an array-size of 5.times.5, in particular to an array-size of 4.times.4 or 6.times.6.

11. (Original) The method as claimed in claim 1, characterized by offering various luminance-reconstruction-filters for appliance, in particular by applying a luminance-reconstruction-filter to an array size of 2.times.2 in case of no or slight optical low pass filtering and/or applying a respective luminance-reconstruction-filter is applied to an increased array-size of 4.times.4 or 6.times.6 upon heavier optical low pass filtering.

12. (Original) The method as claimed in claim 1, characterized by offering various color-reconstruction-filters are offered for appliance, in particular by applying a 3.times.3-color-reconstruction-filter in case of a 4.times.4-luminance-reconstruction-filter and/or applying a 5.times.5-color-reconstruction-filter in case of a 6.times.6-luminance-reconstruction-filter.

13. (Original) The method as claimed in claim 1, characterized by offering various contour-reconstruction-filters for appliance, in particular by applying a 4.times.4-contour-reconstruction-filter in case of a 3.times.3-color-reconstruction-filter or applying a 6.times.6-contour-reconstruction-filter in case of a 5.times.5-color-reconstruction-filter.

14. (Original) The method as claimed in claim 1, characterized by applying a 3.times.3-color-reconstruction-filter in combination with a 5.times.5 contour-reconstruction-filter, in particular by adding subsequently a color-reconstructed and a contour-reconstructed signal for further processing.

15. (Currently Amended) An apparatus for signal processing, comprising an image sensor for providing a sensor signal as an input and a filter for reconstructing the input to establish an output for further processing, wherein the filter comprises at least one reconstruction-filter selected from the group consisting of: a luminance-reconstruction-filter, a red-green-blue-color-reconstruction-filter and a contour-reconstruction-filter, wherein the input comprises a plurality of pixels, and a pixel provides a color value assigned to at least one of the colors red, green or blue, characterized in that the at least one reconstruction-filter is adapted to be applied to an array of pixels of predetermined array size comprising a number of pixels, wherein at least one of the number of pixels is formed by a red-pixel assigned to the color of red, at least one of the number of pixels is formed by a blue-pixel assigned to the color of blue, at least one of the number of pixels is formed by a green-pixel assigned to the color of green and the apparatus is further comprising: a reconstruction block adapted to: weight the red-pixel and/or the blue-pixel by a green-parameter, apply the contour-reconstruction-filter by multiplying pixels of the array of pixels by contour-reconstruction-filter coefficients after weighting by the green-parameter, sum the pixels of the array of pixels into one output pixel, and center the output pixel in the array of pixels and parallel process the contour-reconstruction-filter and a color-reconstruction-filter.

16. (Currently Amended) A computer program product storable on a non-transitory medium readable by a computing system, ~~in particular~~ wherein the

computing system includes a computing system of a camera, comprising a software code section which induces the computing system, wherein a sensor signal of an image sensor is provided as an input and wherein the input is reconstructed in a reconstruction filter to establish an output for further processing, wherein the reconstruction filter comprises a luminance-reconstruction-filter, a red-green-blue-color-reconstruction-filter and a contour-reconstruction-filter, wherein the input comprises a plurality of pixels, and a pixel provides a color value assigned to at least one of the colors red, green or blue, and wherein the computing system is induced to apply the reconstruction filter to an array of pixels of predetermined array size comprising a number of pixels, wherein at least one of the number of pixels is formed by a red-pixel assigned to the color of red, at least one of the number of pixels is formed by a blue-pixel assigned to the color of blue, and at least one of the number of pixels is formed by a green-pixel assigned to the color of green, weight the red-pixel and/or the blue-pixel by a green-parameter, and apply the contour-reconstruction-filter by multiplying pixels of the array of pixels by contour-reconstruction-filter coefficients after weighting by the green-parameter and sum the multiplied pixels into one output-pixel, center the output-pixel in the array of pixels, and apply the contour-reconstruction-filter in parallel with application of a color-reconstruction-filter to the pixels to execute the method as claimed in claim 1
~~when the computer program product is executed on the computing system, in particular when executed on the computing system of the camera.~~

17. (Currently Amended) A computing system or semiconductor device, ~~in particular~~ wherein the computing system includes a computing system of a camera, configured to store and execute a computer program product, wherein the computer program product is a computer program product storable on a non-transitory medium readable by [[a]] the computing system, in particular a computing system

~~of a camera, comprising a software code section which induces the computing system, wherein a sensor signal of an image sensor is provided as an input and wherein the input is reconstructed in a reconstruction filter to establish an output for further processing, wherein the reconstruction filter comprises a luminance-reconstruction-filter, a red-green-blue-color-reconstruction-filter and a contour-reconstruction-filter, wherein the input comprises a plurality of pixels, and a pixel provides a color value assigned to at least one of the colors red, green or blue, and wherein the computing system is induced to apply the reconstruction filter to an array of pixels of predetermined array size comprising a number of pixels, wherein at least one of the number of pixels is formed by a red-pixel assigned to the color of red, at least one of the number of pixels is formed by a blue-pixel assigned to the color of blue, and at least one of the number of pixels is formed by a green-pixel assigned to the color of green, weight the red-pixel and/or the blue-pixel by a green-parameter, and apply the contour-reconstruction-filter by multiplying pixels of the array of pixels by contour-reconstruction-filter coefficients after weighting by the green-parameter and sum the multiplied pixels into one output-pixel, center the output-pixel in the array of pixels, and apply the contour-reconstruction-filter in parallel with application of a color-reconstruction-filter to the pixels to execute the method as claimed in claim 1 when the computer program product is executed on the computing system, in particular when executed on the computing system of the camera.~~

18. (Currently Amended) A camera comprising:
an optical system[()], and
an apparatus for signal processing, the apparatus comprising an image sensor for providing a sensor signal as an input and a filter for reconstructing the input to establish an output for further processing, wherein the filter comprises at

least one reconstruction-filter selected from the group consisting of: a luminance-reconstruction-filter, a red-green-blue-color-reconstruction-filter and a contour-reconstruction-filter, wherein the input comprises a plurality of pixels, and a pixel provides a color value assigned to at least one of the colors red, green or blue, characterized in that the at least one reconstruction-filter is adapted to be applied to an array of pixels of predetermined array size comprising a number of pixels, wherein at least one of the number of pixels is formed by a red-pixel assigned to the color of red, at least one of the number of pixels is formed by a blue-pixel assigned to the color of blue, at least one of the number of pixels is formed by a green-pixel assigned to the color of green and the apparatus is further comprising: a reconstruction block adapted to: weight the red-pixel and/or the blue-pixel by a green-parameter, sum the pixels of the array of pixels into one output pixel, and center the output pixel in the array of pixels and parallel process the contour-reconstruction-filter and a color-reconstruction-filter

~~and a computer program product storable on medium readable by a computing system, in particular a computing system of a camera, comprising a software-code-section which induces the computing system to execute the method as claimed in claim 1 when the computer program product is executed on the computing system, in particular when executed on the computing system of the camera.~~